

**What is Claimed:**

1. A method of protecting humans exposed to sunlight against photoaging, sunburn and skin cancer comprising topically applying to skin of a human a serine protease inhibitor in an amount effective to protect the skin against photoaging, sunburn and skin cancer.

2. The method of claim 1 wherein the serine protease inhibitor is alpha 1-antitrypsin.

3. The method of claim 1 wherein the serine protease inhibitor is applied prior to exposure of the skin to sunlight.

4. The method of claim 1 wherein the serine protease inhibitor is applied subsequent to exposure of the skin to sunlight.

5. A method of protecting individuals with a heightened sensitivity to the sun from damage resulting from the sun comprising topically applying to the skin of an individuals with a heightened sensitivity to the sun a serine protease inhibitor prior to exposure of the individual to the sun.

6. The method of claim 5 wherein the serine protease inhibitor is alpha 1-antitrypsin.

7. A method of protecting humans exposed to sunlight against photoaging, sunburn and skin cancer comprising topically applying to skin of a human milk or a product derived from milk.

8. A pharmaceutical composition for prevention of photoaging and other sun-damage comprising a serine protease inhibitor, a second sunscreen or free radical scavenger, and a pharmaceutical additive.

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9. The pharmaceutical composition of claim 7 wherein the serine protease inhibitor is alpha 1-antitrypsin.

10. A pharmaceutical composition for prevention of photoaging and other sun-damage comprising milk or a product  
5 derived therefrom and a pharmaceutical additive.

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